

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (Currently Amended): A dried hydrogel, prepared by polymerizing an olefinically unsaturated carboxylic acid or its salts in a polymerization reaction mixture;

admixing the polymerization reaction mixture, before, during or after the polymerization and before drying, with an alkali metal silicate of the general formula I



wherein M is an alkali metal and n is from 0.5 to 4;

postcrosslinking a resulting polymer;

thereby obtaining a hydrogel containing a said postcrosslinked polymer; and drying said hydrogel at an elevated temperature, to obtain said dried hydrogel.

Claim 2 (Previously Presented): The dried hydrogel as claimed in claim 1, prepared by admixing said alkali metal silicate in an amount of from 0.05% by weight to 100% by weight, reckoned on SiO₂ and based on a total monomer weight.

Claim 3 (Previously Presented): The dried hydrogel as claimed in claim 1, prepared by admixing said alkali metal silicate in an amount of from 1% by weight to 70% by weight, reckoned on SiO₂ and based on a total monomer weight.

4. (Previously Presented) The dried hydrogel as claimed in claim 1, prepared by admixing said hydrogel after said polymerization with a mixture of an alkali metal

silicate and an alkali metal hydroxide, to thereby neutralize said polymer contained in said hydrogel.

5. (Previously Presented) The dried hydrogel as claimed in claim 1, prepared by admixing said hydrogel after said polymerization with a mixture of an alkali metal silicate and an alkali metal carbonate, to thereby neutralize said polymer contained in said hydrogel.

6. (Previously Presented) The dried hydrogel as claimed in claim 1, prepared by neutralizing said polymer contained in said hydrogel to a pH of from 3.5 to 9.0.

7. (Previously Presented) The dried hydrogel as claimed in claim 1, wherein a drying temperature is in the range from 40°C to 300°C.

8-9. (Cancelled)

Claim 10 (Currently Amended): A process for preparing dried hydrogel particles, comprising:

polymerizing an olefinically unsaturated carboxylic acid or its salts in a polymerization reaction mixture, to obtain a solid gel containing a polymer;

admixing the polymerization reaction mixture before or during the polymerization or admixing said solid gel with an alkali metal silicate of the general formula I



wherein M is an alkali metal and n is from 0.5 to 4;

thereby obtaining particles of a gel; ~~and~~
postcrosslinking said particles of the gel; and
drying said particles of the gel at an elevated temperature, to obtain said dried hydrogel particles.

Claim 11 (Previously Presented): A method for absorbing aqueous solutions, dispersions and emulsions, comprising:

contacting the dried hydrogel according to claim 1 with an aqueous solution, dispersion or emulsion.

Claim 12 (Previously Presented): An article, comprising:

the dried hydrogel according to Claim 1;

said article being capable of absorbing an aqueous fluid.

13. (Previously Presented) The dried hydrogel according to claim 1 which is capable of absorbing an aqueous fluid.

14. (Previously Presented) The dried hydrogel according to claim 1, wherein said olefinically unsaturated carboxylic acid is selected from the group consisting of acrylic acid, methacrylic acid, crotonic acid, 2-acryl-amido-2-methylpropanesulfonic acid, 2-acryl-amido-2-methylpropanephosphonic acid, vinylphosphonic acid and mixtures thereof.

15. (Previously Presented) The dried hydrogel according to claim 1, which contains no post-crosslinker.

16. (Previously Presented) The dried hydrogel according to claim 1, wherein M in formula (I) is sodium.

17. (Previously Presented) The dried hydrogel according to claim 1, wherein M in formula (I) is potassium.

18. (Currently Amended) Dried hydrogel particles, prepared by polymerizing an olefinically unsaturated carboxylic acid or its salt in a polymerization reaction mixture, to obtain a solid gel containing a polymer; admixing said solid gel with an alkali metal silicate of the general formula I



wherein M is an alkali metal and n is from 0.5 to 4;

thereby obtaining particles of a gel; and

postcrosslinking said particles of the gel;

drying said particles of the gel at an elevated temperature, to obtain said dried hydrogel particles.

19. (Previously Presented) The dried hydrogel according to claim 1, which is capable of absorbing aqueous fluids, thereby obtaining a swollen hydrogel.

20. (Previously Presented) The dried hydrogel according to claim 1, wherein said polymer is water-insoluble.

21. (Previously Presented) The dried hydrogel according to claim 1, wherein said polymer is a copolymer.